Smart Grid Deployment Plan

Smart Utility - Standards

STANDARDS

- SDG&E's strategy toward adoption of standards primarily follows under three main drivers:

Applicability

Availability

Cost Effectiveness

SDG&E believes that this strategy provides an orderly implementation of new standards that mitigates technological and stranded cost risks.

- SDG&E also adopts standards as required by statute or regulation.
- SDG&E's smart grid will leverage open standards where possible to ensure interoperability and avoid stranded costs.

STANDARDS

- SDG&E has taken a leadership role in either initiating or actively contributing to major standards development for smart grid systems and smart meters:
  - Founding member in OpenHAN and OpenADR. Participated in AMI-Enterprise, AMI-Security, ZigBee, Home-Plug Alliances.
  - Participating on an ongoing basis with standards and coordination groups such as OpenSG, National Institute of Standards and Technology's (NIST) Smart Grid Interoperability Panel (SGIP), the North American Energy Standards Board (NAESB), the North American Electric Reliability Corporation (NERC) and U.S. Department of Energy.
  - Executive roles in national industry consortiums such as GridWise Alliance and GridWise Architecture Council.
- SDG&E is monitoring the smart grid Catalog of Standards proposed by NIST for potential adoption/implementation based on our internal strategy.

STANDARDS

- **Examples**
  - **Utilization**
    - Green Button
      - NAESB ESPI
    - Equipment
      - Various from ANSI, IEEE, IEC
        - » Working Group participation
    - Information & Communications Technologies
      - Various from IEEE, IETF, IEC
  - **Future**
    - Substations & DER integration
      - IEC 61850
      - Use case development for CIM
    - Smart Energy Profile 2.0